

Amendments to the Claims:

Please cancel claims 40 and 41.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 23. (previously canceled)

24. (previously added) A lighting system for graphics processing, comprising:

(a) at least one input buffer adapted for being coupled to a transform system for receiving vertex data therefrom;

(b) a multiplication logic unit coupled to the at least one input buffer;

(c) an arithmetic logic unit coupled to the at least one input buffer and the multiplication logic unit;

(d) a register unit coupled to the arithmetic logic unit; and

(e) a lighting logic unit coupled to the arithmetic logic unit, the at least one input buffer, and the multiplication logic unit.

25. (previously added) The system as recited in claim 24, wherein the multiplication logic unit has a feedback loop coupled to an input thereof.

26. (previously added) The system as recited in claim 24, wherein the lighting logic unit is coupled to the multiplication logic unit via a conversion module adapted for converting scalar vertex data to vector vertex data.

27. (previously added) The system as recited in claim 24, wherein the arithmetic logic unit and the multiplication logic unit include multiplexers.

28. (previously added) The system as recited in claim 24, wherein the multiplication logic unit includes three multipliers coupled in parallel.

29. (previously added) The system as recited in claim 24, wherein the arithmetic logic unit includes three adders coupled in series and parallel.

30. (previously added) A lighting system for graphics processing, comprising:

(a) at least one input buffer adapted for being coupled to a transform system for receiving vertex data therefrom;

(b) a multiplication logic unit coupled to the at least one input buffer;

(c) an arithmetic logic unit coupled to the at least one input buffer and the multiplication logic unit;

(d) a lighting logic unit coupled to the arithmetic logic unit, the at least one input buffer, and the multiplication logic unit; and

(e) memory coupled to the multiplication logic unit and the arithmetic logic unit.

31. (previously added) The system as recited in claim 30, wherein the memory includes a plurality of constants for processing the vertex data.

32. (previously added) The system as recited in claim 30, wherein the memory has a read terminal coupled to the multiplication logic unit.

33. (previously added) The system as recited in claim 30, wherein the memory has a write terminal coupled to the arithmetic logic unit.

34. (previously added) A lighting system for graphics processing, comprising:

- (a) a multiplication logic unit;
- (b) an arithmetic logic unit coupled to the multiplication logic unit;
- (c) a register unit coupled to the arithmetic logic unit;
- (d) a lighting logic unit coupled to the arithmetic logic unit and the multiplication logic unit; and
- (e) memory coupled to the multiplication logic unit and the arithmetic logic unit.

35. (previously added) A lighting system for graphics processing, comprising:

- (a) at least one input buffer adapted for being coupled to a transform system for receiving vertex data therefrom; and
- (b) a lighting logic unit adapted for receiving the vertex data;
- (c) wherein the lighting logic unit is capable of setting a flag upon the vertex data satisfying predetermined criteria.

36-39. (previously canceled)

C1
40. (canceled by this response)

41. (canceled by this response)
